

# Establishment of Causal Attribution as a Regulatory Strategy for Teaching and Learning

Maziane Brahim, Belaaouad Said, Benmokhtar Said  
Laboratory of PhysicalChemistry of Materials LCPM, Ben M'SikFaculty of Sciences  
B. P. 7955. Bd CdtDriss El Harti. Hassan II University of Casablanca, Morocco  
[maz\\_brahim@yahoo.fr](mailto:maz_brahim@yahoo.fr)



**ABSTRACT:** *The theme of causal attribution has generated a great deal of work and focuses on the factors to which people attribute their behavior.*

*However, its use to explain the results of the evaluation and the support for the regulation of teaching and learning acts has rarely been raised.*

*Indeed, in the evaluation act, which is a privileged moment for reframing the learning process, teachers attribute the results obtained to the student himself, without worrying about the factors to which the student attribute itself these failures. This can distort the regulatory process and increase failure factors.*

*The teacher's attributions of failure often relate to the results of the evaluations and are often explained by factors external to him: such as the lack of commitment of the students, their incompetence and their degree of understanding. and these are internal factors for the student.*

*The aim of this presentation is to show that: the regulation of the teaching and learning act should not only focus on the results of the evaluation but also on the factors to which the student himself attributes his own failure. Involving the student in the teaching act must also involve his involvement in the evaluation and regulation process.*

**Keywords:** Causal Attribution, School Failure, Evaluation Results, Regulation of Teaching Regulation of Learning

**Received:** 28 April 2019, Revised 3 August 2019, Accepted 15 August 2019

**DOI:** 10.6025/jitr/2019/10/4/126-137

© 2019 DLINE. All Rights Reserved

## 1. Introduction

The assessment of knowledge is a special moment for the teacher and the student, to regulate the act of teaching by the teacher and that of learning by the student. This process was defined by Cardinet and included in the summaries of: Perrenoud, 1992-1998; Allal & Mottier Lopez, 2005; Mottier Lopez, 2015). Perrenoud in 1991 defined it in the school context for the teacher as "compendium information on student learning to adjust teaching according to their needs / characteristics / profiles". And

defined the regulation for the student as “An evaluative approach that involves the student in such a way as to engage / support / support an overcoming of learning difficulties, a progression of learning”

However, this regulation is supposed to take into consideration the two protagonists; teacher-pupil, puts most often the focus on the latter and more particularly on the situation of his failure during the evaluation process, without being interested in the factors that are external to him and more particularly the conditions of the teaching.

The phenomenon of widespread failure, which should be a solid foundation on which the regulation process is based, is often defined with reference to circumscribing variables such as repetition, bad grades, drop-out or university education. It is called failure; because it involves standards set by the institution.

Despite the plurality of its facets, the phenomenon of failure elicits multiple explanations and interpretations. What some authors have expressed by causal attributions.

According to (Lloyd Bostock, 1983, Einhorn and Hogarth, 1986) the explanations given for the causes of failures induce causal attributions.

Since the work of the philosophers David Hume and John Stuart Mill, pioneers of causal attributions, this subject has found its place in psychology, because of its importance in explaining the causes to which people attribute their behaviors or behaviors. results of these behaviors. The founder of this concept is Fritz Heider, who was born at the end of the 19th century and published in 1958 his major work The Psychology of Interpersonal Relations. Heider's approach has had a decisive influence in the study of this phenomenon. According to him, in their causal reasoning, individuals refer to two categories of explanations: internal causes and external causes. For example, a car accident can be explained by the poor condition of the road (external cause) and (or) the lack of caution of a driver (internal cause).

However, while interesting work has been done within the framework of causal attribution theories, the package has often been focused on what the teacher produces as explanations for the factors of failure in a more educational situation. than what the student produces himself as an explanation for this phenomenon. In any case, this reveals the rare-t of references in this sense.

Our goal is to objectify the regulation of the act of teaching learning. The summative evaluation seems to us a privileged moment to achieve this. It allows the student to pinpoint what hinders his apprentice-wise and the teacher to revise these teaching practices to maximize the chances of success for student at school.

As a result, a causal attribution of failure factors should be based not only on teacher factors but also on student factors.

The question that arises is to what extent teachers take into account their students' failures in assessments to regulate their teaching processes, and how students analyze the factors of their failure to regulate their learning strategies.

As part of this work, we will focus on the student with particular attention to the criteria to which he can attribute these failures. Knowing that causal attributions in the psychology of education can be grouped into two categories according to whether they indicate a tendency to attribute failure to the student or the teacher.

In many studies, imputing failure to the student allows the adult to become disempowered (Daron and Bar Tal, 1981, Beckman, 1973, Bradley, 1978) and thus protect his self-esteem (Colin, 1982). . This analysis is based on the well-known notion of the defensive function of attributions.

These works are not unanimous, since some authors such as: (Miller and Ross, 1975) Kelley (1973). In other cases contrary, it is the person of the student) who is implicated. This is the case of another group of re-researchers who suggest instead that the teacher is able to take responsibility for failure. (Ross et al., 1974, Ames, 1975, Brand et al., 1975). According to Ames (1975).

These contradictory data call for some clarification. It is interesting to note that the causal attributions of the teacher and the student have been the subject of many works, but those who often lean towards the student are the most cited. Also, faced with a situation of failure, the teacher should be led to question his teaching practices or to question his relationship with the student, while others would make the responsibility for failure to high.

The questions that arise are:

To what extent does the involvement of the student in the evaluation process make it possible to better target the causes of the failure results and to act accordingly to remedy the act of learning.

What predispositions of teachers and trainers to accept the causal attributions emanating from students, to question their teaching practices.

Can students' causal attributions be taken into account in their own failures, as a consolidation of a paradigm shift from teaching to learning.

It is our responsibility to show that: giving students the opportunity to explain the causes of their failures will enable them to succeed in their learning and at the same time enable the teacher to regulate the teaching act.

Indeed, the teacher attributes the failure results to either internal or external factors to the student.

He refers to several factors:

**Emotional Factors:** Such as lack of concentration in the classroom and during assessments.

**Motivational Factors:** Such as lack of classroom participation and lack of commitment in the different phases of the learning act.

**Cognitive Factors:** Lack of basic knowledge and general culture as well as a delay in the average of the study population.

**Constitutional Factors:** Related to certain specific needs is the case of students with certain disabilities.

**Socio-cultural Factors:** Such as the origin of the student and the status of these parents.

All these factors constitute bases on which the teachers rely to regulate the teaching act, and at the same time improve the academic or academic performance of the students and thus try to reduce the failure in question.

What about the look of these same students on their own failure?

Do they share with teachers, the same representations about the factors of failure? Do they evoke the same causes?

It would be a good thing if the two protagonists, (teacher and pupil) agree on the same causes in the face of the same symptoms. In any case, the problem solved necessarily leads to objective decision-making and the choice of regulations for teaching would be judicious.

If so, that of basing the regulations on hypothetical advances and that might not correspond to the reality of failure. This would unfortunately be a waste of time and effort and contribute to the strengthening of failure factors by missing out on the real causes.

How to draw the best conclusions from evaluation results? We suggest (which is not customary) to put the question to the subjects themselves, on the causes of their own failures.

These can reveal to us in turn, internal or external causes.

If it is too easy for a teacher to attribute the failure of these students to factors external to him, he tends to attribute success to factors that are intrinsic to him. Students, for their part, will proceed in the same way and attribute their failure to factors inherent in the teacher himself or his environment.

What the student revealed to us as factors of failure is divided between two factors:

### **Internal factors**

- As the accumulated backlog of contributions to these colleagues: this criterion undermines these intellectual faculties or the lack of investment in the classroom or outside the classroom.
- The impossibility of setting up study and learning strategies.
- Lack of motivation in studies, often related to orientation problems.

### **External Factors**

Here we have noted criteria that teachers do not sign often, and yet remain very credible. These criteria can be divided into 3 groups:

- 1. Criteria related to teaching conditions:** as a program too busy, lack of repetition and explanation, lack of explicit content, lack of teaching learning strategies and studies, or the selective interest vis-à-vis students.
- 2. Criteria related to family conditions:** Problems within the family between the parents or parents children or between the children themselves. Or the absence of conditions of study in the family home.
- 3. Criteria related to the conditions of studies:** and here we can cite the case of turbulent classes or overpopulated classes or even distance between the school and the place of residence. Last but not least, the lack of techno-logical and didactic means of explication of contents and knowledge.

## **2. Material and Methodology**

This work has been done in the university context, and more particularly with students from the Casablanca ENS at Hassan II University and with first year students of the Bachelor's degree in Teaching eps marked by a strong population in a situation of failure because of a sudden transition from highly transmissive school pedagogy to a university context where the student is very involved in his learning process.

The teachers chosen for this study provide modular theoretical courses in the semester, where the students undergo formative assessments, as well as summative evaluations at the end of the semester.

We focused on this study of students in a failed situation. The latter is explained by a score below average.

Students were subject to spot checks and a semester exam1.

The sample chosen for this population is represented by a staff of 124 students divided into 4 classes of 30 students each (123 present and one absent because of public transit).

The double correction of the copies allowed us to harmonize the notes and to classify the students in order to list the students in a situation of failure.

Knowing that the module is validated only if the average of the notes between continuous and final examination is greater than or equal to 10. We found that students with failing grades of less than ten are considered to be failing students.

After posting the results, the students who did not validate the module received a questionnaire on the factors to which they attribute their results.

The questionnaires are not nominative to allow students to complete the questionnaire freely, students have 30 minutes to complete them.

For this questionnaire, we adopted the causal attribution analysis model called the factorial analysis applied to social representation items (Pedhazur, Ped-hazur Schmelkin, 1991, 603, Hair et al., 1995). 385), which we checked by brainstorming with a group of 30 students and then adapted the study to the population for our work.

The items for the factor analysis are as follows:

School timetables  
Program content  
Under-equipped schools  
Learning methods  
Child's work little supported  
Inadequate child labor  
Psychological disorders of the child  
Work organization problems  
Tired household activities  
Belonging to the working class  
Foreign origins  
Family troubles  
Parents too protective  
Education given by parents

We were able to extract from these items the following criteria re-parties between external factors and internal factors:

Internal factors to the student:

Problem of cognitive maturity  
Lack of commitment  
Preparation strategies  
Difficulties of concentration  
Level difference with colleagues  
Personal issues  
Other factors.

External factors to the student:

Difficult courses  
Rhythm of explanation  
Classroom work climate  
School under equipped  
Insufficient explanation  
Family problems  
Other factors.

These different criteria should allow the teacher to know the part of the internal factors and external factors and the degree of their implications in the results obtained by the students.

### **3. Results and Discussions**

A-Analysis and discussions of the results obtained during the written examination.

The average marks obtained by students at the end of semester 1 (continuous and final examinations) are presented as follows:

Distribution of notes during evaluations

A = between 0 and 5 = 15 students

B = between 5 and 10 = 70 students

C = between 10 and 15 = 32 students

D = between 15 and 20 = 6 students

Notes Between 0 and 5 Between 5 and 10 Between 10 and 15 Between 15 and 20

Effective /	123	15	70	32	6
Percentage%	12.19%	56.9%	26.0	17%	4.87%

Table 1. The marks obtained during the examination in anatomy

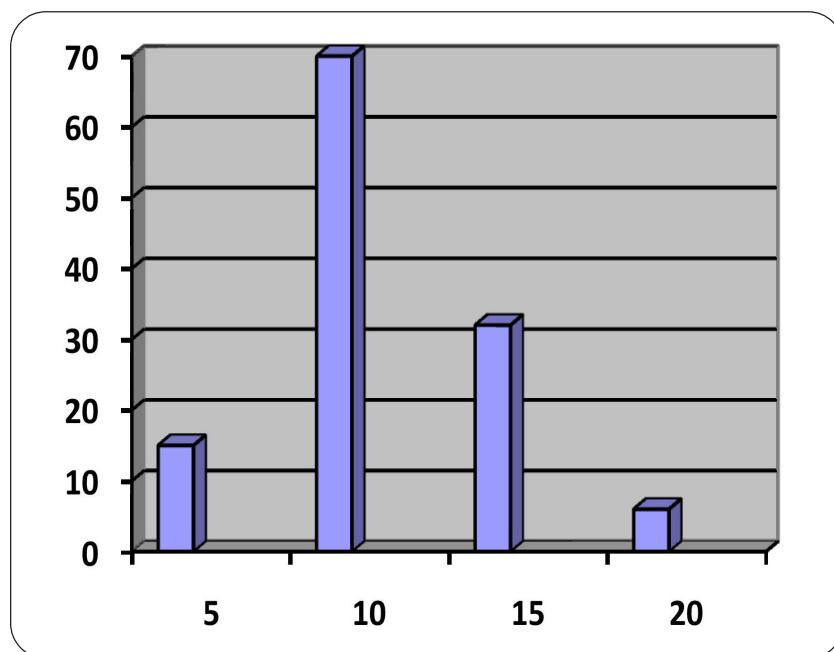


Figure 1. Graphical representation of the grades obtained in the anatomy / physiology module

The analysis of the marks obtained by the candidates in this module is as follows:

38 students validated the module with an average of 13.23 / 20, representing a percentage of 30.89% of the total enrollment.

85 students did not validate the anatomy / physiology module with an average of 8.247 / 20, or 69.10% of the total enrollment.

These results testify to the difficulties of the high to validate the module in question, which at the same time testifies to the difficulties experienced and places them in a situation of failure.

The average required to validate this module being 10/20, a grade below 5 is an eliminatory grade that prevents them from validating the semester as a whole.

The results indicated indicate that the students are in a situation of failure, (or at least in the physiology anatomy module), this module generally remains inaccessible for a majority of students, especially since it is taught in French while a large part of the

students continued their training in high schools in Arabic.

B-Analysis and discussion of the results of the questionnaire on the factors of chess.

In the pursuit of our investigation, our interest will focus exclusively on students in a situation of failure ie those whose average is less than 10/20.

Our new sample consists of 85 students, which represents 69% of the initial population size.

**The questionnaire to be completed has two groups of items:** The first deals with the external factors of failure; the second deals with the factors internal to the pupil.

The results are shown in Table 2.

Internal factors to

The student Frequency External factors to the student Frequency

Cognitive maturity	9	Difficult courses	45
Lack of commitment	26	Rhythm of explanation	35
Preparation Strategies	15	Classroom Work Climate	19
Difficulties of concentration	14	School under equipped	14
Level difference with colleagues	5	Insufficient explanations	35
Personal problems	25	Family factors	33
Other	14	Other	19

Table 2. Results of the factor analysis applied to the items of the social representations on the factors of failure

Frequency is the number of students who responded favorably for the criterion in question.

This table is presented in the form of graphs to better visualize the data.

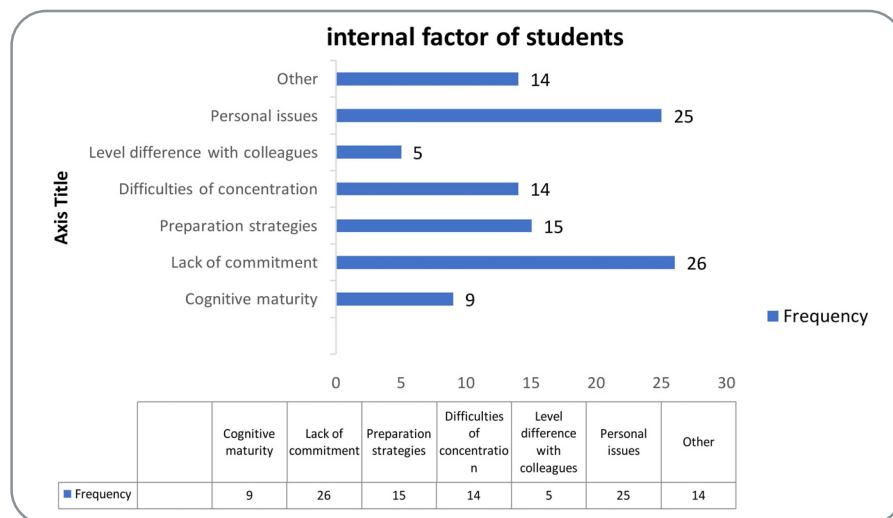


Figure 2. Graphical presentation of the internal failure factors for the student

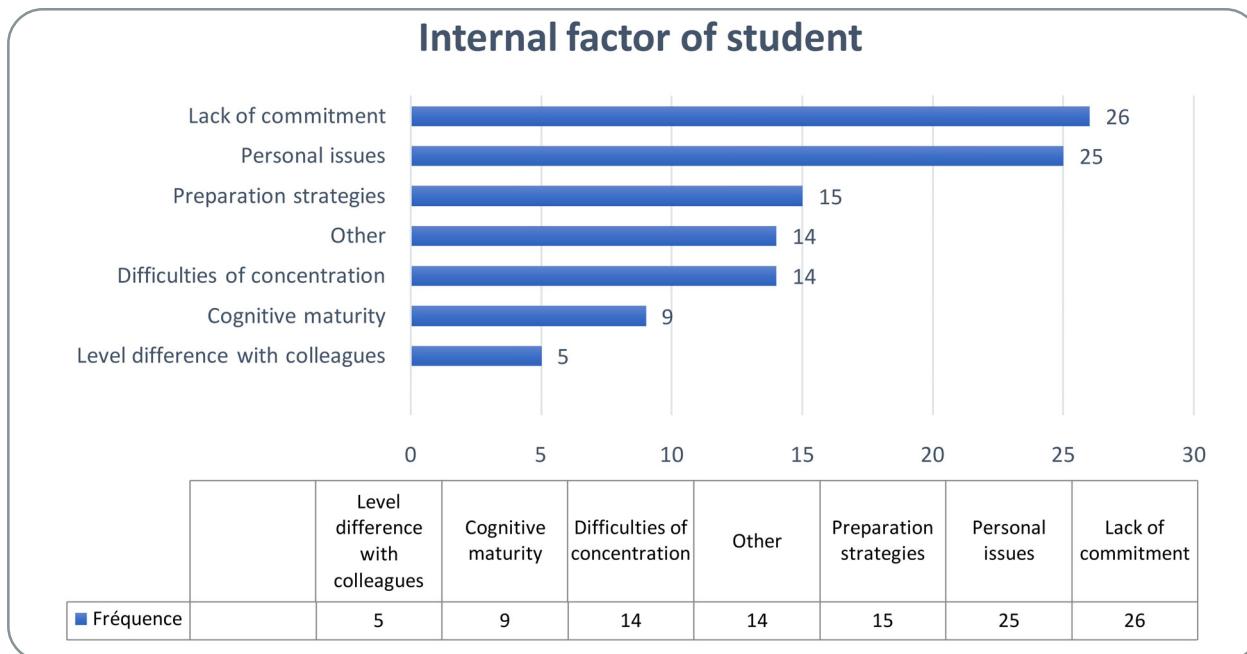


Figure 3. Graphical presentation of the student's internal failure factors ranked in order of importance

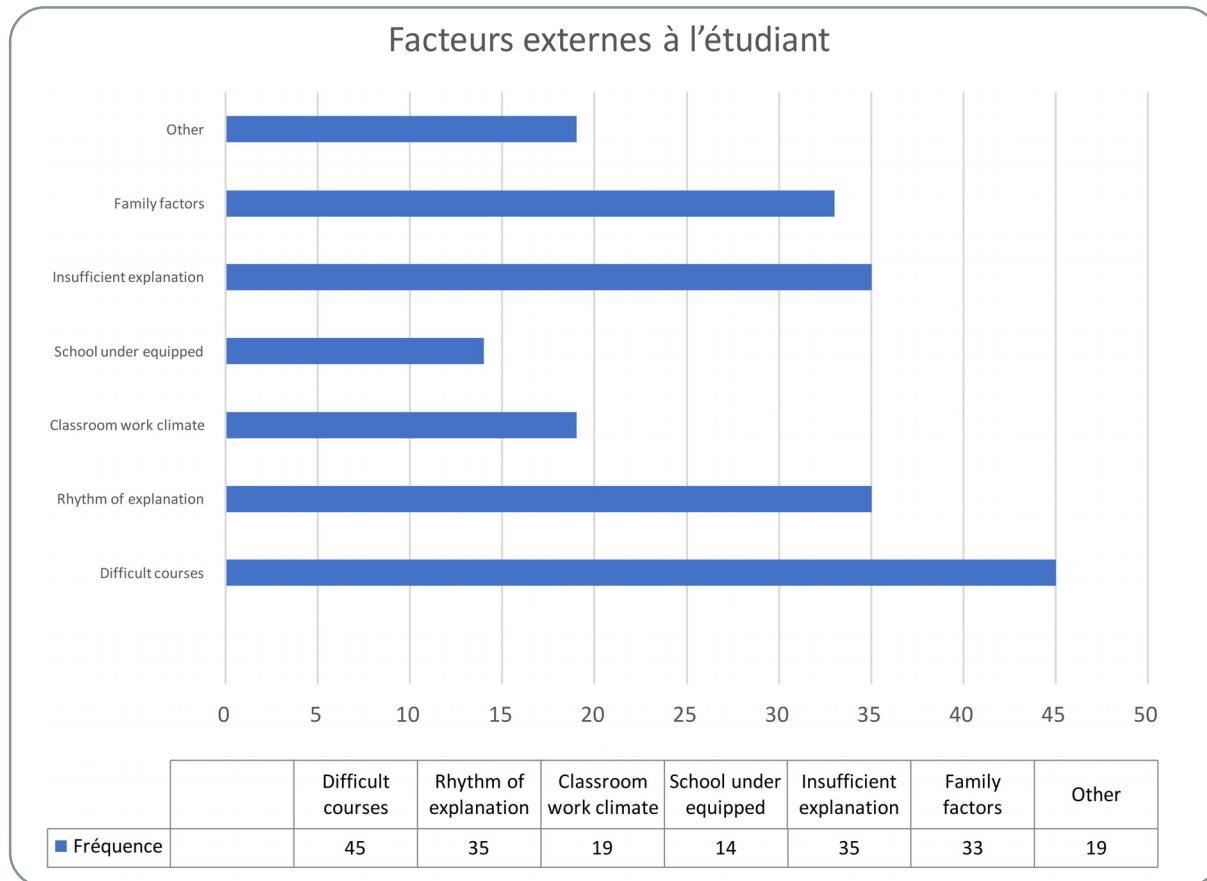


Figure 4. Graphical presentation of external failure factors to the student

The graph shows that among the internal factors of failure, the one relating to the lack of commitment of the pupils is the most striking, but with a rather weak index (26/123 students) which explains that the students recognize their part in the situation of failure to which they are confronted.

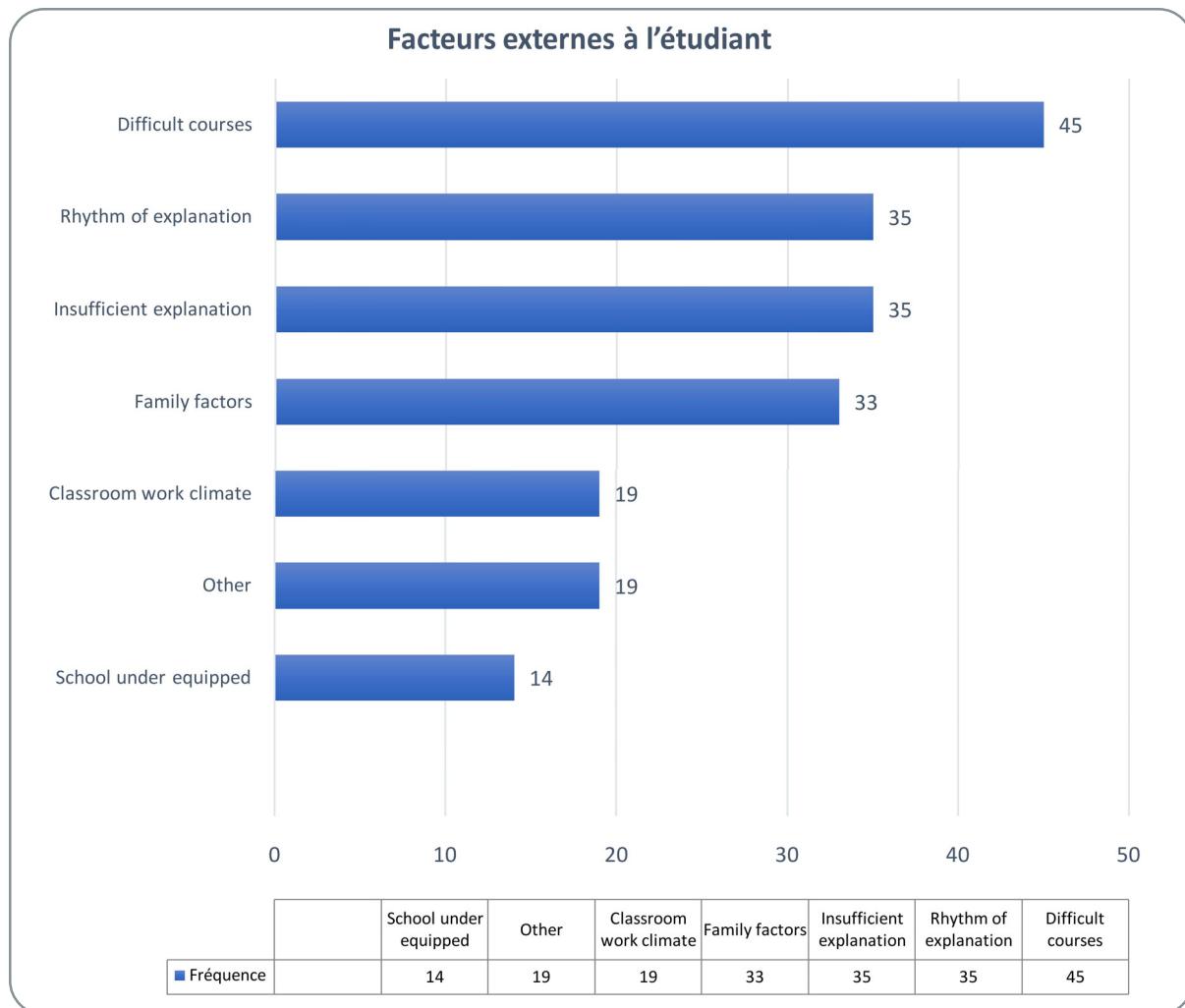


Figure 5. Graphical presentation of the external factors of failure to the student ranked in order of importance

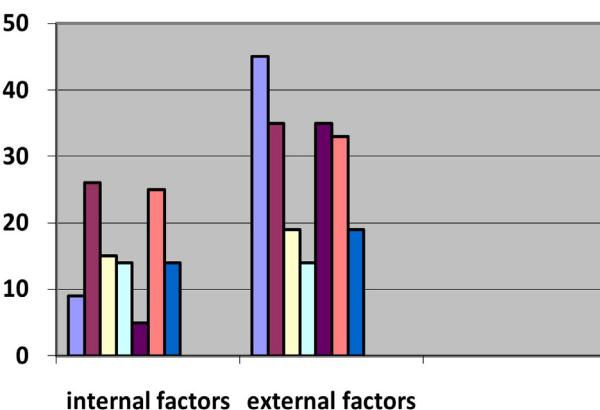


Figure 6. Comparative graph of the attribution of internal factors and external factors of failure by students

This second table relating to the factors external to students shows that the most striking criterion is that relating to the difficulty of the courses, followed by that of the rhythm of the explanation, by themselves these factors occupy 60% of the sounding at 80 students out of 123. These are factors that target the training content and the teachers and the level of training.

This graph gives us an indication of the tendency of students to attribute their failures to external factors rather than to internal factors.

What encourages them in this way is the fact that the questionnaires are anonymous, and that the students in a situation of failure tend to present in an objective way the factors of their failures.

The results obtained show a great disparity of answers as to the factors of failure in this test.

The most striking are the criteria related to factors external to the candidates, in the absence of surveys relating to teachers' attributions on the factors of student failure.

The main causes are related to the family circle followed by those relating to the teacher and the conditions of teaching.

These two criteria alone are very important.

The lowest criteria are those relating to the subjects themselves.

The percentages in the criteria is an irrefutable index of the usefulness of considering the factors explaining the results of the evaluations by the students themselves and not based on the results themselves; to take action on possible change of teaching method.

We should note that the criteria on which we can work and obtain credible results are those relating to the subjects themselves, because the students can question themselves and develop strategies of study and learning allowing them to improve their skills. university performances, or at least in the event in question.

### **C-Modalities of Regulation of the act of Teaching and Learning**

To break with the idea that evaluation is just a moment to rate students is, in our opinion, unfounded in light of the results obtained. It will be interesting to consider this step as a means of knowing the results, but it is also a very important step in the process of regulating teaching and learning.

Like feedback, knowing the results of teacher and student assessments helps pinpoint the factors that condition failure or success.

If we consolidate our results by explaining the factors of failure, by referring to the laws of causal attributions, this will allow us to better diagnose the pheno-leads of failure and to act knowingly.

If the student can explain the factors of failure that are internal to him, this will enable him to modify these strategies of study and learning, and to organize himself differently and more efficiently in order to overcome his shortcomings and this cognitively, metacognitively, emotionally and also that of the management of the resources at his disposal.

The regulation of learning for the student would therefore be based on the results of evaluations, better understand them, analyze them and explain them in order to present other alternatives for successful learning.

The process of regulation in the teacher goes in the direction of the understanding of the causes of failure among the students, without omitting the factors which are internal to him.

The recognition and acceptance of the factors of internal failure to the teacher and the questioning of his teaching practices is the key to success in the process of regulation of the teaching act.

Reviewing one's teaching strategies, educational and pedagogical practices in order to reduce the factors of failure among

students is the way to be followed for a real consideration of the learner.

#### 4. Conclusion

Ignoring the results of assessments and replicating self-instruction is no longer on the agenda, as this does not put the student at the center of the education system. To attribute the results of failures to the students does not solve the didactic and pedagogical excesses.

It was therefore a question of seeing the importance of going beyond the results of the evaluations, to take action on possible regulations of the teaching process.

Not to rely solely on the causal attributions of teachers, because they are often subjective and abstract from failures in terms of pedagogy and didactics.

To give more importance to the representations of the students on their own failures.

Improvement of the educational system also involves regulation of the teaching process as well as learning by the pupil.

Prior learning assessment is a crucial moment to achieve this end. This gives the student the opportunity to explain these sources of failure himself, makes him aware of his learning and at the same time allows teachers and trainers to regulate their teaching act in a objective.

The objective of this work was to concretize the will to put the student at the center of the concerns of the teaching act, to pass from the teaching paradigm to that of the learning. To achieve this, we sought to involve the student in the process of evaluating these causes of failure. This process allows the teacher to have a feedback on these strategic choices regarding teaching and learning.

The causal assignment of failures allows the student to be aware of these causes of failure.

The results of the questionnaire show that students also focus on internal factors of failure, but also on external factors. These are often neglected by the teacher trainers.

This work also aims at the evaluation of teachers by students, which allows them to have a critical look at their pedagogical approaches and their teaching methods.

#### References

- [1] Alhassan, A. B., Anya, C. A. (2017). Forms and Consequences of examination Malpractices' in Nigeria's Schools and Universities: What Should the Stakeholders Do?. *International Journal of education, Training and Learning*, 1(1) 9-21.
- [2] AMES, R. (1975). Teachers' Attribution of Responsibility: Some Unexpectedly Unusual Effect, *Journal of Educational Psychology*, 67, 668-676. AMES R, 1983, Teachers' attribution for their own teaching, A Reexamination of the Factor Fiction Question, *Journal of Personality and Social Psychology*, 36, 56-71.
- [3] Asim, A., Kumar, N. (2003). Service Quality in Higher Education: Expectations and Perceptions of Students. *Asian Journal of Contemporary Education*, 2(2) 70-83. education: New trends and innovations, 2, 13-17.
- [4] Louis, B. (2007). Optimizing the chances of success of the student at the University by acquiring skills transversales, in from near far, *Journal Cahiers Francophones of Central Eastern Europe* n° 13, under the direction of Ar-pad Vigh and Eva Oszetzky, University Presses of Pécs (Hungary).
- [5] Brandt, L., Hayden, M. E., Brophy, J. (1975). Teachers' attitudes and descriptions of causation, *Journal of Educational Psychology*, 67, 677-682.
- [6] Daron, E., Bar-tal. (1981). Causal perception of pupils' success or failure by teachers and pupils: a comparison, *Journal of Educational Research*, 4, 233-239.

- [8] Deschamps, J. C. (1973). Attribution, social categorization and intergroup representations, *Bulletin de Psychologie*, n° 27, 710-721.
- [9] Heider, Fritz. (1958). Who was born at the end of the 19th century and published in 1958 his major work *The Psychology of Interpersonal Relations*.
- [10] Levine, J. M., Wang (eds.), M. C. (1992). Teacher and student perceptions: implications for learning, Hillsdale, LEA. GOSLING P., 1992, Who is responsible for school failure? Paris, University Presses of France. 1989a, Causal Attribution: From Cognitive Processes to Collective Beliefs, Oxford, Basil Blackwell.
- [11] Deschamps, J. C., Clemence (eds.), A. (1973). Attribution. Causality and explanation daily, Paris, Neuchâtel, Delachaux and Niestlé. Kelley H., 1973, The processes of causal attribution, *American Psychologist*, 28.
- [12] Hewstone, M., Jaspars, J. (1982). Explanations for Racial Discrimination: The Effect of Group Discussion on Intergroup Attributions, *European Journal of Social Psychology*, 12, 1-16.
- [13] Hutchison, M. A., Follman, D. K., Sumpter, M., Bodner, G. M. (2006). Factors influencing the self efficacy beliefs of first year engineering students. *Journal of Engineering Education*, 95(1) 39-47.
- [14] Low-stakes external evaluations: teachers confronted with themselves? [Abstract | Restricted] Published in French Review of Education, 194 | 2016.
- [15] The Effects of External Evaluation on Teaching Practices: A Review of the Literature [Full text] Published in French Review of Education, 189 | October-November-December 2014.
- [16] The Effects of Using Semantic Mapping Strategy Training on Reading Comprehension Performance Among Uthm Students Thuwaibah binti Mohd Junaid, 7(3.21). Special Issue 21.
- [17] Youcef AÏSSANI. (2011). Explanation of school failure and social representation Master of lectures, IUT of Tarbes - Paul Sabatier University, Toulouse.

#### **Paper Reference**

Esteban Rozenwajn and Xavier Dumay, "External evaluations with low stakes: teachers confronted with themselves? », French Review of Education, 194 | 2016, 71-90.

#### **Electronic Reference**

Esteban Rozenwajn and Xavier Dumay, "External evaluations with low stakes: teachers confronted with themselves? »French Review of Education [Online], 194 | 2016, posted on 01 Jun 2020, accessed 23 April 2019. URL: <http://journals.openedition.org/rfp/4977>; DOI: 10.4000/rfp.4977